## ABSTRACT OF THE DISCLOSURE

## A HARDWARE/SOFTWARE BASED INDIRECT TIME STAMPING METHODOLOGY FOR PROACTIVE HARDWARE/SOFTWARE EVENT

## DETECTION AND CONTROL

An improved method and apparatus for time stamping events occurring on a large scale distributed network uses a local counter associated with each processor of the distributed network. Each counter resets at the same time globally so that all events are recorded with respect to a particular time. The counter is stopped when a critical event is detected. The events are masked or filtered in an online or offline fashion to eliminate non-critical events from triggering a collection by the system monitor or service/host processor. The masking can be done dynamically through the use of an event history logger. The central system may poll the remote processor periodically to receive the accurate counter value from the local counter and device control register. Remedial action can be taken when conditional probability calculations performed on the historical information indicate that a critical event is about to occur.

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